

AIR QUALITY PERMIT

Issued To: Rock Solid Enterprises, Inc.
P.O. Box 1262
Havre, Montana 59501

Permit #4199-00
Application Complete: 2/11/08
Preliminary Determination Issued: 3/6/08
Department Decision Issued: 3/25/08
Permit Final:
AFS #777-4199

An air quality permit, with conditions, is hereby granted to Rock Solid Enterprises, Inc. (Rock), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Permitted Equipment

Rock operates a portable crushing/screening operation. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

Rock operates a portable crushing/screening facility that will initially locate in the S ½ Section 26, Township 33 North, Range 16 East, in Hill County, Montana. However, Permit #4199-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Rock intends to locate in or within 10 km of certain PM₁₀ nonattainment areas.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Rock shall not cause or authorize to be discharged into the atmosphere from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher, any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 Code of Federal Regulation (CFR) 60, Subpart OOO).
2. Rock shall not cause or authorize to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
3. Rock shall not cause or authorize to be discharged into the atmosphere, from any non-NSPS affected equipment, any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
4. Water and water spray bars shall be available on-site at all times and used, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749).

5. Rock shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
6. Rock shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. Rock shall not operate more than two crushers at any given time and the maximum rated design capacity shall not exceed 1100 tons per hour (TPH) (ARM 17.8.749).
8. Crusher production from the facility shall be limited to 9,636,000 tons during any rolling 12-month time period (ARM 17.8.749).
9. Rock shall not operate more than one screen at any given time and the maximum rated design capacity shall not exceed 600 TPH (ARM 17.8.749).
10. Screen production from the facility shall be limited to 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).
11. Rock shall not operate more than one diesel generator at any given time and the maximum rated design capacity of the engine shall not exceed 604 horsepower (hp) (ARM 17.8.749).
12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Rock, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
13. Rock shall comply with all applicable standards and limitations, and the reporting, record keeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
14. Rock shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, for any applicable diesel engines (ARM 17.8.340, 40 CFR 60, Subpart IIII).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR Part 60.675, must be performed on all NSPS-affected equipment to demonstrate compliance with the emissions limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340, 40 CFR Part 60, Subpart A and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. Rock shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. All records compiled in accordance with this permit shall be maintained by Rock as a permanent business record for at least 5 years following the date of the measurement, shall be available at the plant site for inspection by the Department, and shall be submitted to the Department upon request (ARM 17.8.749).
3. Rock shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units, as required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

4. Rock shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745(1), that would include the addition of a new emissions unit, a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, fuel specifications, or would result in an increase in source capacity above its permitted operation.

The notice must be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d)(ARM 17.8.745).

5. Rock shall document, by month, the crushing production from the facility. By the 25th day of each month, Rock shall calculate the crushing production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. Rock shall document, by month, the screening production from the facility. By the 25th day of each month, Rock shall calculate the screening production from the facility for the previous month. The monthly information will be used to

verify

compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Rock shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS), observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Rock fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Rock of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Rock may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

- J. Rock shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program.

PERMIT ANALYSIS
Rock Solid Enterprises, Inc.
Permit #4199-00

I. Introduction/Process Description

A. Permitted Equipment

Rock Solid Enterprises, Inc. (Rock) owns and operates a portable crushing/screening facility consisting of a portable jaw crusher (up to 500 tons per hour (TPH)), cone crusher (up to 600 TPH), 3-deck screen (up to 600 TPH), a diesel generator (up to 604 horsepower (hp)), and associated equipment.

This portable crushing/screening facility was previously permitted in a different location under Permit #3254-00. The facility moved from the original permitted location and operated in this location for more than one year. Pursuant to Administrative Rules of Montana (ARM) 17.8.765, once a portable facility moves from the original location it can only operate in the new location for less than one year. In an effort to avoid potential on-going compliance issues, the facility requested the Department of Environmental Quality (Department) revoke the original permit, and Rock applied for a new permit in the new location (home pit).

The proposed original location for the facility under this permit is in the S ½ Section 26, Township 33 North, Range 16 East, in Hill County, Montana. Permit #4199-00 will apply to the source while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Rock intends to locate in or within 10 km of certain PM₁₀ nonattainment areas.

B. Process Description

Rock proposes to use this crushing/screening plant to crush and sort sand and gravel materials for use in various construction operations. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor and passed through the crusher, where the material is crushed. Materials are crushed and sent to the screen, where materials are separated and conveyed to stockpile.

Rock currently operates a diesel generator associated with this crusher plant that is rated at 320 kilowatt (kW), which converts to 487 horsepower (hp) power output. However, Rock operates a wash plant that has a permitted diesel generator rated at 387 kW (519 hp output), which was estimated to be equivalent to an engine size of 604 hp based on an assumed 15% efficiency loss. In order to keep the crusher permit de minimis-friendly, since the wash plant's diesel generator may be used with the crusher in case the primary engine goes down, this permit authorizes use of an engine up to the size of the wash plant engine.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary, using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Rock shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than four hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Rock must comply with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Rock shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or allow to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS), including the following subparts:
 - 40 CFR 60, Subpart OOO - In order for a crushing/screening plant to be subject to the requirements of 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Rock, the crushing/screening equipment to be used under Permit #4199-00 is subject to this subpart.
 - 40 CFR 60, Subpart IIII: Subpart IIII, Stationary Compression Ignition Internal Combustion Engines, will apply for any diesel generator manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005. Since the permit is written to allow Rock to operate any diesel generator up to 604 hp, this regulation could apply in the future.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that Rock submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Rock submitted the appropriate permit application fee as required for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, modify, or use any asphalt plant, crusher, or screen that has the potential to emit greater than 15 tons per year of any pollutant. Rock has the potential to emit more than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), oxides of nitrogen (NO_x), and carbon monoxide (CO); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Rock submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Rock submitted an affidavit of publication of public notice for the February 8, 2008, issue of *The Havre Daily News*, a newspaper of general circulation in the Town of Havre in

Hill County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Rock of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of Rock, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond those found in its permit limits, unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, subchapters 8, 9, 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer, including a Transfer of Location notice and an affidavit of publication from a newspaper of general circulation in the area to be affected. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's potential to emit (PTE) is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #4199-00 for the Rock facility, the following conclusions were made:
 - a. The facility's permitted PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.

- d. This facility is not subject to any current National Emission Standards for Hazardous Air Pollutants (NESHAP) standards.
- e. This facility is subject to current NSPS standards (40 CFR 60, Subpart A General Provisions, and Subpart OOO, Non-Metallic Mineral Processing Plants OOO) and may be subject to 40 CFR 60, Subpart IIII.
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an Environmental Protection Agency (EPA) designated Title V source.

Based on these facts, the Department determined that the crushing/screening plant will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Rock will be required to obtain a Title V Operating Permit.

However, the diesel engine powered generator permitted under the crushing/screening plant may be operated with other emitting units owned/operated by Rock, located on contiguous or adjacent property. If the generator has the potential to be used in conjunction with other equipment under the same 2-digit Standard Industrial Classification (SIC) Code, or as support equipment for another Rock facility, then the potential emissions must be considered in aggregate. There is a potential for this source, as well as the source(s) of emissions that the generator is being used with, to have an aggregated potential to emit greater than the 100 TPY threshold for the Title V operating permit program. If this situation arises, Rock is expected to modify their permit(s) so that federally enforceable permit limits can be included to keep the potential emissions below major source permitting thresholds or to apply for and receive a Title V operating permit.

III. BACT Determination

A BACT determination is required for any new or modified source. Rock shall install on the new or modified source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be used.

Rock shall not cause or authorize to be discharged into the atmosphere from any NSPS-affected crusher any visible emissions that exhibit an opacity of 15% or greater averaged over 6 consecutive minutes. Rock shall not cause to be discharged into the atmosphere from any other NSPS-affected equipment, such as screens or conveyor transfers, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. Rock shall not cause to be discharged into the atmosphere from any non-NSPS affected equipment any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes. Rock must also take reasonable precautions to limit the fugitive emissions of airborne particulate matter from haul roads, access roads, parking areas, and the general plant property. Rock is required to use water spray bars and water and/or chemical dust suppressant, as necessary, to maintain compliance with the opacity and reasonable precaution limitations. The Department determined that using water spray bars and water and/or chemical dust suppressant to maintain compliance with the opacity requirements and reasonable precaution limitations constitutes BACT for these sources.

Due to the relatively small amount of PM, PM₁₀, NO_x, CO, VOC, and SO_x emissions produced by the diesel generator, add-on controls would be cost prohibitive. Thus, the Department determined

that no additional control would constitute BACT for the generator. The control options selected have controls and control costs similar to other recently permitted similar sources and these controls are capable of achieving the established emissions limits.

IV. Emission Inventory

Source	Tons/Year					
	PM	PM ₁₀	NO _x	VOC	CO	SO _x
2000 JCI Cone Crusher (up to 600 TPH)	3.15	1.40				
Universal Primary Jaw Crusher (up to 500 TPH)	2.63	1.18				
2000 JCI (6'x20') 3-deck screen (up to 600 TPH)	5.78	1.93				
Truck Unloading	0.13	0.13				
Material Transfer (Conveyor)	1.84	0.61				
Pile Forming	25.40	12.05				
Bulk Loading	0.04	0.04				
Diesel Engine (up to 604 hp)	5.74	5.74	81.69	6.66	17.61	5.39
Haul Roads	12.68	3.60				
Total	57.74	26.81	81.69	6.66	17.61	5.39

- A complete emission inventory for Permit #4199-00 is on file with the Department.

V. Existing Air Quality

Permit #4199-00 is issued for the operation of a portable crushing/screening plant to be initially located in the S ½ Section 26, Township 33 North, Range 16 East, in Hill County, Montana. This proposed site is designated as an attainment/unclassified area for the National Ambient Air Quality Standards (NAAQS). Also, this facility is a portable source that would operate on an intermittent and temporary basis and any effects to air quality will be minor and short-lived.

VI. Ambient Air Quality Impact Analysis

Permit #4199-00 will cover the operation while operating at any location within Montana, excluding those counties that have a Department-approved permitting program and those locations in or within 10 km of certain PM₁₀ nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and any air quality impacts will be minor and short-lived.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
1520 East Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Rock Solid Enterprises, Inc.
P.O. Box 1262
Havre, Montana 59501

Permit Number: #4199-00

Preliminary Determination Issued: March 6, 2008

Department Decision Issued: March 25, 2008

Permit Final:

1. *Legal Description of Site:* Rock submitted an application to operate a portable crushing/screening plant in the S ½ Section 26, Township 33 North, Range 16 East, in Hill County, Montana. Permit #4199-00 would apply while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.* An addendum to this air quality permit will be required if Rock intends to locate in or within 10 km of certain PM₁₀ nonattainment areas.
2. *Description of Project:* The permit application proposes the construction and operation of a portable crushing/screening plant that would consist of a portable jaw crusher (up to 500 tons per hour (TPH)), cone crusher (up to 600 TPH), 3-deck screen (up to 600 TPH), diesel generator engine (up to 604 horsepower (hp)), and associated equipment. For a typical operational setup, unprocessed materials are loaded into the crushing/screening plant by a hopper and transferred by conveyor and passed through the crusher, where the material is crushed. Materials are crushed and sent to the screen, where materials are separated and conveyed to stockpile.
3. *Objectives of Project:* The object of the project would be to produce business and revenue for the company by the sale and use of aggregate. The issuance of Permit #4199-00 would allow Rock to operate the permitted equipment at various locations throughout Montana, including the proposed initial site location.
4. *Additional Project Site Information:* In many cases, this crushing/screening operation may move to a general site location or open cut pit, which has been previously permitted through Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.
5. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Rock demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was

eliminated from further consideration.

6. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #4199-00.
7. *Regulatory Effects on Private Property Rights:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.
8. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment.* The “no action alternative” was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
H.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I.	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

Summary of Comments on Potential Physical and Biological Effects: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the crushing/screening operations. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, as the crushing/screening operations would be considered a minor source of emissions and would have intermittent and seasonal operations. Storm water runoff from the crushing/screening operation may end up in an on-site pond which is used for the wash plant. This pond functions as a settling pond, although overflow may leave the property during high rain events and potentially impact downstream aquatic life.

Furthermore, air emissions from the crushing/screening plant would have only minor effects on terrestrial and aquatic life because facility emissions would have good pollutant dispersion in the area of operations (See Section 8.F). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the proposed crushing/screening operation.

B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. However, pollutant deposition and water use would only cause minor, if any, impacts to water resources in these areas because the facility is small and only a small amount of water would be required to be used (See Section 8.F of this EA). Further the site is relatively flat and minimal water runoff would be expected to occur as discussed in 8.A. Therefore, only minor surface and groundwater quality impacts would be expected.

C. Geology and Soil Quality, Stability, and Moisture

The crushing/screening operations would have only minor impacts on geology and soil quality, stability, and moisture of soils. Only minor impacts from deposition of air pollutants on soils would result (as described in Section 8.F of this EA) and only minor amounts of water would be used for pollution control. Thus, only minimal water runoff would occur (as described in Section 8.B of this EA). Since only minor amounts of pollution would be generated and corresponding emissions would be widely dispersed before settling upon vegetation and surrounding soils (as described in Section 8.D of this EA), impacts would be minor. Therefore, any effects upon geology and soil quality, stability, and moisture at this proposed operational site would be minor.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetative cover, quality, and quantity because the facility would operate in an area where vegetation has been previously disturbed and the facility would be a small industrial operation. The facility would be a relatively minor source of emissions and the pollutants would be greatly dispersed (as described in Section 8.F); therefore, deposition on vegetation from the proposed project would be minor. Also, because the water usage would be minimal (as described in Section 8.B) and the associated soil disturbance from the application of water and water runoff would be minimal (as described in Section 8.C), corresponding vegetative impacts would be minor.

E. Aesthetics

The crushing/screening operation would be visible and would create additional noise while operating at this proposed site. However, Permit #4199-00 would include conditions to control emissions, including visible emissions, from the plant. Further, the crushing/screening operation would be portable, would operate on an intermittent and seasonal basis, and would be a small industrial source. Therefore, any visual aesthetic impacts would be minor.

F. Air Quality

Air quality impacts from the proposed project would be minor because the facility would be relatively small, would operate on an intermittent and temporary basis, and would locate in a previously disturbed site. Permit #4199-00 would include conditions limiting the facility's opacity and crushing/screening production and requiring water and water spray bars be available on-site and used to ensure compliance with opacity standards. Permit #4199-00 would also limit total emissions from the crushing/screening facility and any additional Rock equipment operated at the site to 250 tons per year or less, excluding fugitive emissions.

Further, the Department determined that the crushing/screening facility would be a minor source

of emissions as defined under the Title V Operating Permit Program because the source's PTE is below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the facility would be minimal because the pollutants emitted would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would have minimal deposition (due to site topography and minimal vegetative cover) on the surrounding area. Therefore, air quality impacts from operating the screening equipment in this area would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) to identify any species of concern associated with the initial proposed site location (S ½ Section 26, Township 33 North, Range 16 East, in Hill County, Montana). The search results concluded there is one species of special concern within ¾ mile of the site: *Sander canadensis*, which is a fish known as a "Sauger". The Milk River is habitat for the Sauger, which is listed as "sensitive" by the Bureau of Land Management (BLM). However, based on the small size and temporary nature of equipment operations and the minimal disturbance to the environment (water, air, and soils) that would occur in the area of operation, the Department determined that only minor impacts to any unique endangered, fragile, or limited environmental resources would be expected to occur.

H. Demands on Environmental Resources of Water, Air, and Energy

Due to the relatively small size of the facility, the crushing/screening operation would only require small quantities of water, air, and energy for proper operation. Only small quantities of water would be required for dust suppression of emissions being generated at the site. In addition, impacts to air resources would be minor because the source is a small industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed as described in Section 8.F of this EA. Energy requirements would also be small, because the facility would be powered by one small industrial diesel engine that would use minor amounts of fuel. Overall, any impacts to water, air, and energy resources would be minor.

I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed crushing/screening plant.

J. Cumulative and Secondary Impacts

The crushing/screening operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility would generate relatively small amounts of emissions of PM, PM₁₀, NO_x, VOC, CO, and SO_x. Emissions and noise generated from the equipment would, at most, only result in minor impacts to the area of operations because the crushing/screening plant would be relatively small, seasonal, and temporary. The site is moderately remote, since it is 3½ miles northeast of Havre, although there are two houses located approximately ¼ mile from the proposed operational site.

Further, no other sources are expected to operate as a result of permitting this equipment. Additionally, this facility, in combination with other emissions from Rock equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall,

cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

9. *The following table summarizes the potential economic and social effects of the proposed project on the human environment.* The “no action alternative” was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D.	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G.	Quantity and Distribution of Employment			X			yes
H.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X			yes
L.	Cumulative and Secondary Impacts			X			yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The crushing/screening operation would cause no disruption to the social structures and mores in the area because the source would be a minor industrial source of emissions, would be separated from the general population, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in Permit #4199-00, which would limit the effects to social structures and mores.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the proposed crushing/screening operation because the proposed site is separated from the general population, and the facility is a portable source with seasonal and intermittent operations. The predominant use of the surrounding area is farmland and would not change as a result of this screening operation. Therefore, the cultural uniqueness and diversity of the area would not be affected.

C. Local and State Tax Base and Tax Revenue

The crushing/screening operations would have little, if any, impact on the local and state tax base and tax revenue because the facility would be a relatively small industrial source and would have seasonal and intermittent operations. The facility would require the use of only a few employees.

Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

D. Agricultural or Industrial Production

The crushing/screening operations would have only a minor impact on local industrial production since the facility would be a minor source of aggregate production and air emissions. Also, the facility would locate in an area adjacent to farmland and at a site that can be used for animal grazing and agricultural production. Therefore, because minimal deposition of air pollutants would occur on the surrounding land (as described in Section 8.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be small and temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation, as described in Section 8.D of this EA.

E. Human Health

Permit #4199-00 would incorporate conditions to ensure that the crushing/screening facility would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits that would be required by Permit #4199-00. Also, the facility would be operating on a temporary basis and pollutants would disperse from the ventilation of emissions at this site (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the proposed crushing/screening facility.

F. Access to and Quality of Recreational and Wilderness Activities

Noise from the facility would be minor because the facility is a crushing/screening operation that would be small and operate in an area removed from the general population. As a result, the amount of noise generated from the crushing/screening operation would be minimal. Also, the facility would operate on a seasonal and intermittent basis on private land and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

G. Quantity and Distribution of Employment

The portable crushing/screening operation would be relatively small, would have seasonal and intermittent operations, and would only require a few employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the screening facility. Therefore, only very minor effects upon the quantity and distribution of employment in this area would be expected.

H. Distribution of Population

The portable crushing/screening operation would be small and would only require a few existing employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the screening facility. Therefore, the screening facility would not disrupt the normal population distribution.

I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the crushing/

screening operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be minor, due to the relatively small size and seasonal nature of the crushing/screening facility.

J. Industrial and Commercial Activity

The crushing/screening operation would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

K. Locally Adopted Environmental Plans and Goals

Rock would be allowed, by Permit #4199-00 to operate in areas designated by EPA as attainment or unclassified for ambient air quality. An Addendum would be required to operate in or within 10 km of a PM₁₀ nonattainment area. Permit #4199-00 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility would be a small and portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

L. Cumulative and Secondary Impacts

The crushing/screening operations would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source would be a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Rock, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An Environmental Impact Statement (EIS) is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Department of Environmental Quality (Air Resources Management Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Christine Weaver

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